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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,726	04/15/2004	Peter Hansen	1100-078	8821

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EXAMINER

MERCHANT, SHAHID R

ART UNIT	PAPER NUMBER
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3694

NOTIFICATION DATE	DELIVERY MODE
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09/16/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/825,726	Applicant(s) HANSEN ET AL.	
	Examiner SHAHID R. MERCHANT	Art Unit 3694	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 12, 2010 has been entered.

Status of the Claims

2. This action is in response to the request for continued examination filed on July 12, 2010.

- Claims 1-44 are pending.
- Claims 1-24 have been cancelled.
- Claims 25-27, 29, 31, 33, 35-38, 40-41 and 43-44 have been amended.

Response to Arguments

3. Applicant argues on pages 14 and 15, the rejection of claim 44 under 35 U.S.C. § 112 1st. Applicant points to paragraphs 1, 6, 11, 16, 21 and 22 for support. Examiner reviewed these paragraphs and could not find any support for terms like computer software product, computer-usable medium and computer readable instructions.

Applicant's argument is not persuasive and therefore the rejection holds.

4. Next, Applicant argues on page 15, the rejection of claims 33 and 36-43 under 35 U.S.C. § 112 2nd. The previous rejection of these claims has been withdrawn, however a new 35 U.S.C. § 112 2nd will be made below.

5. Applicant argues on page 15, the rejection of claims 25-35 and 36-43 under 35 U.S.C. § 101. The rejection of claims 36-43 has been withdrawn, however the rejection under 35 U.S.C. § 101 remains. Applicant amended claim 25 to recite a processor or computer system performing one or more steps of the method claim. However, the steps being performed by the computer system appear to be data gathering steps. Applicant is advised to recite a computer system performing the most novel or inventive step in the method claim. The limitation calculating in real-time or near real-time one or more execution qualities... appears to be the inventive step.

6. Applicant's arguments with respect to claims 25-44 have been considered but are moot in view of the new ground(s) of rejection.

7. Examiner notes that Applicant argues that QOE does not disclose or teach the limitation of claim 32. Examiner disagrees. Item 7 of QOE clearly shows 200 shares being executed (market volume executed) being compared to aggregate volume figures

Art Unit: 3694

of 4800x300, 4800x300 and 1200x1100 (volume being traded for a security) and ISLD and FBCO are other market participants.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claim 25 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant introduces the limitation “an order identity of interest...” The previously mentioned terms and limitations constitute new matter. Applicant is advised to point out in the original disclosure where the claimed subject matter appears otherwise the new subject matter should be removed from the claims. Applicant is advised to review section **706.03(o) [R-3] New Matter** of the MPEP.

10. Claim 44 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant introduces the limitation “A computer software product, comprising a computer-usable medium having computer readable instructions

Art Unit: 3694

stored thereon...” The previously mentioned terms and limitations constitute new matter. Applicant is advised to point out in the original disclosure where the claimed subject matter appears otherwise the new subject matter should be removed from the claims. Applicant is advised to review section **706.03(o) [R-3] New Matter** of the MPEP.

35 U.S.C. 132. Notice of rejection; reexamination.

(a) Whenever, on examination, any claim for a patent is rejected, or any objection or requirement made, the Director shall notify the applicant thereof, stating the reasons for such rejection, or objection or requirement, together with such information and references as may be useful in judging of the propriety of continuing the prosecution of his application; and if after receiving such notice, the applicant persists in his claim for a patent, with or without amendment, the application shall be reexamined. **No amendment shall introduce new matter into the disclosure of the invention.**

11. Claim 33 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant introduces the limitation “blocking communication of one or more order executions to the trader...” The previously mentioned terms and limitations constitute new matter. Applicant is advised to point out in the original disclosure where the claimed subject matter appears otherwise the new subject matter should be removed from the claims. Applicant is advised to review section **706.03(o) [R-3] New Matter** of the MPEP.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 25-35 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

14. Regarding claim 25, it is unclear what is meant by the term or phrase "an order identity of interest..." Further, Examiner did a word search in the originally filed specification and could not find this term or phrase.

Claim Rejections - 35 USC § 101

15. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

16. Claims 25-35 are rejected under 35 U.S.C. 101. Based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to a machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In re Bilski et al, 88 USPQ 2d 1385 CAFC (2008); Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876). The steps being performed by the computer system appear to be data gathering steps. Applicant is advised to recite a computer system performing the most novel or inventive step in the method claim.

Art Unit: 3694

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 25-28, 30, 33-39 and 42-44 rejected under 35 U.S.C. 103(a) as being unpatentable over Buckwalter et al., U.S. Patent Application Publication 2003/0177085 (see PTO-892, Ref. C).

19. As per claim 25, Buckwalter teaches a method, for providing a real-time or near real-time assessment of market trade transactions in an electronic communication network, comprising:

receiving, by a computer system operatively connected to said electronic communication network between a trader and a broker, an order identity of interest (see paragraph 32);

intercepting, by said computer system, from a communication between a trader and a broker one or more market orders, matching said order identity of interest (see paragraph 37);

storing an identity of each of said one or more market orders (see paragraph 39);

selecting and intercepting, by said computer system, from a communication between said broker and said trader one or more order executions, or portions thereof, matching at least one of said stored identity (see paragraphs 41-42);

receiving by an execution quality calculation module of said computer system real-time or near real-time market data related to said one or more market order executions (see paragraphs 31-39); and

calculating in real-time or near real-time one or more execution qualities corresponding to each of said one or more order executions and said market data, and conveying in real-time or near real-time information regarding said one or more execution qualities (see paragraphs 43-45 and 58).

Buckwalter discloses conveying execution quality data to a broker, but does not explicitly convey the execution quality data to a trader. It would have been obvious to one skilled in the art to convey execution quality data to a trader. One would be motivated to convey execution quality data to a trader because it would make the trader aware of the general quality of trading as taught by Buckwalter (see paragraph 53). Further, it would have been obvious to substitute a trader in place of a broker because both parties would be interested in the results of execution quality and the substitution would have yielded predictable results.

20. As per claim 26, Buckwalter teaches the method of claim 25 as described above. Buckwalter does not explicitly teach wherein said intercepting and said selecting and intercepting are performed without interfering with communications between said trader and said broker. However, one skilled in the art would know that it is understood that when one is measuring execution time and other time related qualities, one would not want to further increase execution time or conveying time by interfering with communications between trader and broker. Therefore, it would be prima facie obvious

Art Unit: 3694

to a person of ordinary skill in the art at the time of the invention to modify the teachings of Buckwalter to intercept and select and intercept without interfering with communications between said trader and said one or more brokers because interfering may increase execution time and that is a quality that one wants to keep at a minimum.

See ***KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007)**.

21. As per claim 27, Buckwalter teaches the method of claim 25 as described above. Buckwalter further teaches wherein said information comprises an indication of deviation of a value describing said at least one of said one or more execution qualities from one or more predetermined limits (see paragraph 40).

22. As per claim 28, Buckwalter teaches the method of claim 25 as described above. Buckwalter further teaches wherein said information related to said one or more execution qualities is provided via a display (see paragraph 44).

Buckwalter discloses conveying execution quality data to a broker, but does not explicitly convey the execution quality data to a trader. It would have been obvious to one skilled in the art to convey execution quality data to a trader. One would be motivated to convey execution quality data to a trader because it would make the trader aware of the general quality of trading as taught by Buckwalter (see paragraph 53). Further, it would have been obvious to substitute a trader in place of a broker because both parties would be interested in the results of execution quality and the substitution would have yielded predictable results.

23. As per claim 30, Buckwalter teaches the method of claim 25 as described above. Buckwalter further teaches wherein said information comprises a comparison of

Art Unit: 3694

execution qualities for a plurality of market orders of said one or more market orders (see Figure 4).

24. As per claim 33, Buckwalter teaches the method of claim 25 as described above. Buckwalter further teaches wherein after said selecting and intercepting said one or more order executions from a communication between said broker and said trader, the method further comprising:

- blocking communication of said one or more order executions to the trader for a period of time;

- aggregating said one or more order executions to a predetermined size of transaction; and

- conveying said aggregate of order executions (see paragraphs 45-46).

Buckwalter discloses conveying execution quality data to a broker, but does not explicitly convey the execution quality data to a trader. It would have been obvious to one skilled in the art to convey execution quality data to a trader. One would be motivated to convey execution quality data to a trader because it would make the trader aware of the general quality of trading as taught by Buckwalter (see paragraph 53). Further, it would have been obvious to substitute a trader in place of a broker because both parties would be interested in the results of execution quality and the substitution would have yielded predictable results.

25. As per claim 34, Buckwalter teaches the method of claim 25 as described above. Buckwalter further teaches wherein said information related to said one or more

Art Unit: 3694

execution qualities is accumulated over a predetermined period of time (see Figure 4 and paragraph 53).

26. As per claim 35, Buckwalter teaches the method of claim 25 as described above. Buckwalter further teaches wherein said information related to said one or more execution qualities is provided via a display, said information comprises one or more of the following:

a visual identification of a plurality of execution qualities comprising all or selected one or more execution qualities which have been earlier or currently provided for a plurality of market orders comprising all or selected market orders of said one or more market orders (see Figure 4).

Buckwalter discloses conveying execution quality data to a broker, but does not explicitly convey the execution quality data to a trader. It would have been obvious to one skilled in the art to convey execution quality data to a trader. One would be motivated to convey execution quality data to a trader because it would make the trader aware of the general quality of trading as taught by Buckwalter (see paragraph 53). Further, it would have been obvious to substitute a trader in place of a broker because both parties would be interested in the results of execution quality and the substitution would have yielded predictable results.

27. Claim 36 recites similar limitations to claim 25 and thus rejected using the same art and rationale in the rejection of claim 25 as set forth above.

28. Claim 37 recites similar limitations to claim 26 and thus rejected using the same art and rationale in the rejection of claim 26 as set forth above.

Art Unit: 3694

29. Claim 38 recites similar limitations to claim 27 and thus rejected using the same art and rationale in the rejection of claim 27 as set forth above.

30. Claim 39 recites similar limitations to claim 28 and thus rejected using the same art and rationale in the rejection of claim 28 as set forth above.

31. Claim 42 recites similar limitations to claim 34 and thus rejected using the same art and rationale in the rejection of claim 34 as set forth above.

32. Claim 43 recites similar limitations to claim 35 and thus rejected using the same art and rationale in the rejection of claim 35 as set forth above.

33. Claim 44 recites similar limitations to claims 25 and 36 and thus rejected using the same art and rationale in the rejection of claims 25 and 36 as set forth above.

34. Claims 29, 32 and 40 rejected under 35 U.S.C. 103(a) as being unpatentable over Buckwalter et al., U.S. Patent Application Publication 2003/0177085 (see PTO-892, Ref. C) in view of Quality of Execution, LLC (see PTO-892, Ref. V).

35. As per claim 29, Buckwalter teaches the method of claim 25 as described above. Buckwalter does not explicitly teach wherein at least one of said one or more execution qualities is assessed by calculating a difference between a volume-weighted average price of said intercepted order executions, and a volume-weighted average price of said real-time or near real-time market data. QOE teaches wherein at least one of said one or more execution qualities is assessed by calculating a difference between a volume-

Art Unit: 3694

weighted average price of said intercepted order executions, and a volume-weighted average price of said real-time or near real-time market data (see items 3, 5, 9 and 10).

Therefore, it would be prima facie obvious to a person of ordinary skill in the art at the time of the invention to combine the teachings of Buckwalter and QOE to calculate a difference between a volume-weighted average price of said intercepted order executions, and a volume-weighted average price of said real-time or near real-time market data because it would make the trader aware of the general quality of trading as taught by Buckwalter (see paragraph 53).

36. As per claim 32, Buckwalter teaches the method of claim 25 as described above. Buckwalter does not explicitly teach wherein said information comprises a proportion of a market volume executed for a selected market order of said one or more market orders compared to a volume being traded for a security of said selected market order by other market participants. QOE further teaches wherein said information comprises a proportion of a market volume executed for a selected market order of said one or more market orders compared to a volume being traded for a security of said selected market order by other market participants (see item 7).

Therefore, it would be prima facie obvious to a person of ordinary skill in the art at the time of the invention to combine the teachings of Buckwalter and QOE to provide a user information regarding a proportion of a market volume executed for a selected market order of said one or more market orders compared to a volume being traded for a security of said selected market order by other market participants because it would

Art Unit: 3694

make the trader aware of the general quality of trading as taught by Buckwalter (see paragraph 53).

37. Claim 40 recites similar limitations to claim 29 and thus rejected using the same art and rationale in the rejection of claim 29 as set forth above.

38. Claims 31 and 41 rejected under 35 U.S.C. 103(a) as being unpatentable over Buckwalter et al., U.S. Patent Application Publication 2003/0177085 (see PTO-892, Ref. C) in view of Agarwal, et al., U.S. Patent Application Publication 2002/0099646 (see PTO-892, Ref. E).

39. As per claim 31, Buckwalter teaches the method of claim 25 as described above. Agarwal teaches wherein said information comprises a comparison of performance of two or more selected brokers using said one or more execution qualities for a selected market order such that the best broker out of said selected brokers is further selected by said trader for subsequent transactions (see paragraph 134 and Figure 12).

Therefore, it would be prima facie obvious to a person of ordinary skill in the art at the time of the invention to combine the teachings of Buckwalter and Agarwal to rank brokers based on execution quality and select the best broker for future transactions because it would allow a trader to determine whether the broker represents value for money based on execution qualities and ratings as taught by Agarwal (see paragraph 2).

40. Claim 41 recites similar limitations to claim 31 and thus rejected using the same art and rationale in the rejection of claim 31 as set forth above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHAHID R. MERCHANT whose telephone number is (571)270-1360. The examiner can normally be reached on First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James P. Trammell can be reached on 571-272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/825,726
Art Unit: 3694

Page 16

/Shahid R Merchant/
Primary Examiner, Art Unit 3694